# Readiness Based Sparing Overview







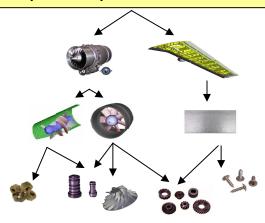




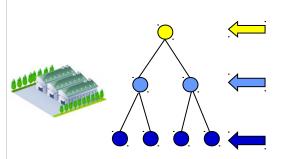
# Readiness-Based Sparing addresses a challenge common across DOD

- What to stock: parts, components, sub-systems (*multi-indenture*)
- Where to stock: at strategic distribution points (SDPs), forward distribution points (FDPs), and/or at squadron-level or operational distribution points, (*multi-echelon*)

Together make up two-dimensional Multi-indenture, Multi-echelon (MIME) RBS



**Multi-indenture:** RBS assesses trade-offs within various parts, components, and sub-systems



Strategic distribution point (SDP) - 4 locations Forward distribution point (FDP) 12 Operational distribution point (numerous)

**Multi-echelon:** RBS assesses trade-offs of stocking levels for individual and/or multiple distribution points

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# The Services and DLA agreed on the value of leveraging coordinated COTS solution(s) in 2005

- Identification of the common requirement for COTS tools
- Leveraging COTS functionality and best practices
- Alignment of objectives and metrics
- Alignment of business processes that would better enable end-to-end planning for common items
- Cross-DoD interoperability
- Resolution of common problems, solving them once
- Leveraging lessons learned and expertise across Components



## Today, DoD has a common RBS vision

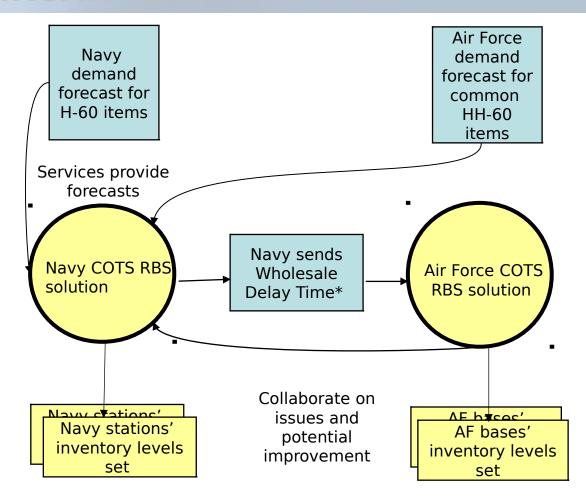
# Interoperable, yet individualized, COTS RBS solutions aligned with Service specific requirements and constraints

- <u>COTS RBS solutions</u> provide the ability to leverage functional capability, advances in information technology, integration with ERP systems, and software support
- •<u>Individualized</u> RBS solutions address the service-unique missions, forces, maintenance philosophies, weapon systems requirements, and ERP systems environment
- •<u>Interoperability</u> enables the sharing of demand data and wholesale delay times across DoD which will lead to more effective inventory investment, driving greater availability at the same or reduced cost.



# Individual, interoperable COTS RBS solutions interact as shown below

- The Navy manages
   wholesale levels of
   inventory for spares
   common to the HH-60, an
   aircraft used by both the
   Navy and the Air Force.
- The Navy will use a combination of their own demand forecast, as well as the Air Force – provided demand forecasts, to set wholesale levels.
- As they monitor inventory levels, the Navy will communicate wholesale delay times to the Air Force so that they can set their retail levels appropriately.





# Multiple efforts moving towards RBS vision

#### Navy

<u>Project description</u>: Integrating MCA Solutions' Supply Parts Optimizer (SPO) into spares requirement determination process for aviation (next phase expands to maritime). Developing collaborative multi-indenture, multi-echelon (MIME) RBS process between DLA and Navy, which can be repeated for other Services.

<u>Expected outcome</u>: fully operational COTS RBS environment to support retail and wholesale for both aviation and maritime, eliminating several custom developed legacy models <u>Status</u>: Completed SPO analysis for F/A-18, and comparison of SPO with legacy AVCAL. SPO expected to reduce wholesale and retail requirements, reduce churn cost

#### Air Force

<u>Project description:</u> Exploring capabilities and applicability of Click Commerce's Advanced Inventory Optimization (AIO), which is the RBS logic embedded in the USAF ERP solution. Developing "Meta-model" concept to support coordinated inventory management for common items and analyzing potential benefits.

**Expected outcome**: A COTS RBS solution incorporated in the ERP.

<u>Status:</u> Benchmarked AIO against legacy models and achieved results comparable to legacy RBS tools. Furthered collaboration with 'meta-model' to manage items common across Services

#### DLA

<u>Project description</u>: Utilizing JDA Software Group's Inventory Policy and Optimization (IPO) to calculate multi-echelon inventory levels, which are needed to support retail initiatives <u>Expected outcome</u>: replace outdated and suboptimal safety stock computation used today <u>Status</u>: Current modeling of multi-echelon network indicates savings in purchase requests

#### Army

<u>Project description</u>: Complete technical evaluation of SPO. Investigating methods, policies, and best practices for establishing, storing, and maintaining actionable BOMs Expected outcome: July 2008 decision

Status: Evaluation completed and determined SPO does not meet RBS requirements for Army



## **COTS RBS** is expected to drive results

### Several legacy systems to be retired

- Navy
  - ARROW (aviation retail only RBS model)
  - ACIM (maritime retail only RBS model)
  - CARES (wholesale model)
  - VOSL (retail consumable model)
- Air Force
  - AAM (peacetime, system-wide sparing and repair planning)
  - RBL (retail supply)
  - COLT (retail consumable requirements)

### Inventory savings / readiness improvements

- Navy
   Validated AVCAL savings, allowance churn cost 7% less than legacy
- Air Force
   Data sharing expected to lead to increase HH-60 aircraft availability by 10%; identified potential increase of 40% with additional investment.

### New capabilities

DLA setting of retail level safety stocks, important to support BRAC



## **Oversight process established**

Owner	Action	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	No v	De c
DoD Component s	Submit project proposals to SCI (using template)					<b>}</b>							
	Brief proposed project to SCCG												
	Provide project updates to SCCG												
SCI	Review proposals for alignment w/ objectives and goals							<b>\</b> .					
	Approve and reject proposals and provide necessary funds							. (					
SCCG	Review proposals and prioritize for funding decisions												